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XXV. Note on the Genus Ancistrocladus of Wallich. By G. H. K. THWAITES, Esq., F.L.S. &c., Superintendent of the Botanic Garden of Peradenia, Ceylon.

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HAVING recently had opportunities of examining the structure of the flowers of *Ancistrocladus Vahlii*, as well as its fruit in various stages of development, I have been enabled to arrive at a more correct knowledge of their structure than appears to have been previously within the reach of botanists who have described species of this genus, and there would seem to be now little room for uncertainty as to where the genus should be located.

The circumstance of the fruit of *Ancistrocladus* being surmounted by the enlarged segments of the calyx has led to the genus being introduced by different botanists into the several families of *Combretaceæ*, *Malpighiaceæ* and *Dipteraceæ*; from all these, however, it essentially differs in its seeds being albuminous.

With the Symploceæ it seems to me that Ancistrocladus would associate better than with any other group of plants, agreeing with them in its undivided exstipulate leaves, its character of inflorescence, imbricated calyx and corolla, persistent calyx, stamens adhering to the base of the corolla, inferior ovary, albuminous seeds and cylindrical embryo. From Symploceæ, however, it differs in its scandent habit, its calycine segments becoming enlarged, its solitary erect ovule, and the peculiar structure of its albumen.

With the *Myristiceæ* and *Anonaceæ*, *Ancistrocladus* would seem to have some slight affinity, its only ovule recalling to mind that of *Myristica*, and the embryo not being very dissimilar in the two genera; whilst the scandent habit and uncinate ramuli give *Ancistrocladus* some considerable resemblance to *Artabotrys*.

The following generic character has been drawn up from an inspection of fresh specimens of *Ancistrocladus Vahlii*, Arn., and from the figure of *Ancistr. Heyneanus*, Wall., in the last volume of Dr. Wight's admirable 'Icones Pl. Ind. Orientalis.'

Genus Symploceis affine.

ANCISTROCLADUS, Wallich. Wormia, Vahl. Bigamea, König.

Flores hermaphroditi. Calyx tubo cum ovario connato; limbo 5-partito; laciniis oblongis, inæqualibus, imbricatis, tribus majoribus, omnibus increscentibus, persistentibus. Corollæ petala 5, æqualia, concava, basi connexa. Stamina 5, imæ corollæ inserta, petalis alterna, (in Anc. Heyneano stamina 10 in seriebus duabus). Filamenta basi incrassata, monadelpha, apice cuspidata; antheræ adnatæ, biloculares, longitudinaliter dehiscentes; loculis basi divergentibus. Ovarium inferum, 1-loculare. Ovulum unicum, erectum, anatropum. Stylus subglobosus, persistens. Stigmata 3, erecta, linearia, compressa, truncata, decidua. Nux coriacea, calycis laciniis coronata. Semen cerebriforme, erectum; testå plicato-intricatå, albumen carnosum plicis involventi. Embryo orthotropus, clavatus; cotyledones subfoliacei, divergentes; radicula prope hilum posita.

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Frutices indici et zeylanici, soboliferi, scandentes; ramis elongatis, teretibus; ramulis brevibus, patentibus, uncinatis; uncis circinatis, sub nodis ramulorum positis, internodia terminantibus; foliis lanceolatis,

utrinque angustatis, sessilibus, integerrimis, lævibus, penniveniis, densè reticulatis, in ramos distantibus, ad ramulorum apices aggregatis, vernatione convolutis; inflorescentià axillari, racemosă; racemis plùs minùsve ramosis; pedunculis angularibus paucifloris; floribus alternis; pedicellis brevissimis, rachi articulatis; bracteis minutissimis.

The Ancistrocladus Vahlii, W.-Arn. (Wormia hamata, Vahl, C.P. No. 1600 in Herb. Peradeniensi), is very abundant in some of the warmer districts of Ceylon, and owing to its spreading so much by its roots, is a very troublesome weed to the cultivator. Its Cinghalese name is Gonavel or Gonapittanwel.

DESCRIPTION OF THE PLATE.

TAB. XXIV.

Fig. 1. Unexpanded flower of Ancistrocladus Vahlii, Arn.

Fig. 2. Flower with the corolla and stamens removed.

Fig. 3. Corolla and stamens.

Fig. 4. Stamens.

Fig. 5. Longitudinal section of ovary, showing the single erect ovule.

Fig. 6. Ovule removed.

Fig. 7. Longitudinal section of ovule.

Fig. 8. Early development of the seed, where the testa has become slightly rugose.

Fig. 9 & 10. Somewhat later development of seed, the testa becoming plicate.

Fig. 11. Still later development of seed.

Fig. 12. Still later development of seed.

Fig. 13. Still later development of seed.

Fig. 14. Longitudinal section of ripe seed, showing the embryo in position.

Fig. 15. Embryo removed.

Fig. 16. Portion of the brittle albumen invested with the plicæ of testa.

Fig. 17. Longitudinal section of immature fruit.

Fig. 18. Longitudinal section of mature fruit.